

## ABSTRACT

A data storage system comprises a first storage system, a second storage system, and a third storage system. The first storage system receives individual data files from a customer system, and on an individual file-by-file basis substantially in real time from  
5 receiving each of the individual data files, determines individual file types for the individual data files and transfers the individual data files based on the individual file types over a bonded time division multiplex connection. The second storage system receives and stores the individual data files on the individual file-by-file basis, and subsequently forms blocks of data including the individual data files, and transfers the  
10 blocks of data over an internet protocol connection. The third storage system receives and stores the blocks of data.